

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

At the outset, Applicants note with appreciation the courtesy of a personal interview extended by Examiner Debra Charles to Applicants' representative, Chien Yuan. The personal interview was conducted on October 7, 2004.

Claims 13-18, 20-40, and 42-60 are pending in the above-identified application. Claims 19 and 41 are canceled without prejudice or disclaimer by the present amendment. Further, the present amendment amends claims 13-18, 20-25, 27-29, 31-40, and 42-50, and adds new claims 51-60. Applicants respectfully that support for these claim amendments is self-evident from Applicants' originally-filed disclosure, including the claims and drawings. Thus, no new subject matter is introduced by the foregoing amendment.

The Office Action rejected claims 13, 18, 19, 23, and 27 under 35 U.S.C. § 103(a) as unpatentable over Fenner (U.S. Patent No. 5,561,706A), Castro (U.S. Patent No. 5,359,642A), and Tabbane (U.S. Patent No. 5,519,758A). Also, claims 14-17, 20-22, 24-26, and 28-30 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenner, Castro, and Tabbane, and further in view of Kohashi (JP 01108613). Claims 31-41 and 43-49 were rejected under 35 U.S.C. § 103(a) as unpatentable over Fenner and Tabbane. Claim 42 was rejected under 35 U.S.C. § 103(a) as unpatentable over Fenner and Tabbane, and further in view of Ginsberg (U.S. Patent No. 6,067,730A). Claim 50 was rejected under 35 U.S.C. § 103(a) as unpatentable over Fenner and Tabbane, and further in view of Ginsberg.

Applicants respectfully submit that the pending claims patentably define over the cited art.

For example, amended claim 13 is drawn to a customer terminal device that includes, among other features, a pre-paid amount memory area configured to store pre-payment data

corresponding to a pre-paid amount of money, a first profile memory area configured to store a dynamic client profile, and a processor configured to determine the dynamic client profile based on at least one random variable of a previous connection. Referring to the non-limiting example shown in Applicants' Figure 1, a mobile telephone 1 includes a SIM chip card 10 that includes a chip card processor 100 and memory areas 101-103. The memory area 101 is configured to store a dynamic user profile, and the memory area 103 is configured to store a prepaid amount of money.¹

Fenner, Castro, and Tabbane do not disclose or suggest amended claim 13. Fenner is directed to a system that is capable of locating and tracking personal identification numbers to link billing amounts to these personal identification numbers instead of to particular communications devices.² Each personal identification number is associated with a service profile that describes the services for which the personal identification number is authorized.³ Fenner discloses a data base 8 that stores personal identification number service profiles and a PCS switch 4 that determines, via a billing authority 6, if requested calls should be authorized based on the data stored in the data base 8.⁴

Fenner does not, however, disclose a customer terminal device, such as a mobile telephone or a fixed telephone, for example, that includes (1) a pre-paid amount memory area configured to store pre-payment data corresponding to a pre-paid amount of money, (2) a first profile memory area configured to store a dynamic client profile, and (3) a processor configured to determine the dynamic client profile based on at least one random variable of a previous connection. Rather, Fenner depicts the PCS switch 4, which is not a customer terminal device and which does not include a pre-paid amount memory area, a first profile

¹ *Id.* at page 8, lines 21-28; and Figure 1.

² See Fenner at col. 1, lines 16-22 and 49-54.

³ See *id.* at col. 1, lines 55-59.

⁴ See *id.* at Figure 1 and at col. 2, lines 38-55.

memory area, and a processor configured to determine a dynamic client profile based on at least one random variable of a previous connection.

Further, a personal identification number described in Fenner does not represent a dynamic client profile that is determined based on at least one random variable of a previous connection, such as the duration of a previous connection. Instead, the services associated with a particular identification number in Fenner are fixed and not dynamically alterable by random variable associated with previous connections.

To remedy the deficiencies of Fenner with respect to claim 13, the Office Action turns to Castro, which is directed to a system for allowing pre-payment of connections in a telecommunications switching network.⁵ The telecommunications switching network depicted in Castro includes multiple billing systems 5, which are each coupled to a central switching station.⁶

With regards to amended claim 13, Castro does not disclose a customer terminal device that includes (1) a pre-paid amount memory area configured to store pre-payment data corresponding to a pre-paid amount of money, (2) a first profile memory area configured to store a dynamic client profile, and (3) a processor configured to determine the dynamic client profile based on at least one random variable of a previous connection.

For example, data associated with pre-payment in Castro is stored in a billing system 5, and not in a customer terminal device.⁷ In fact, Castro clearly shows in Figure 1 that each billing system 5 is separately arranged from cellular phones 3, which fall under one sub-category of customer terminal devices. Further, Castro is completely silent on a memory area configured to store a dynamic client profile and a processor configured to determine the dynamic client profile.

⁵ See Castro at Figure 1 and at col. 2, lines 27-34.

⁶ See *id.* at Figures 1 and 2.

⁷ See *id.* from col. 6, line 63, to col. 7, line 12.

For at least these reasons, Castro fails to remedy the deficiencies of Fenner with respect to amended claim 13.

To remedy the deficiencies of Fenner and Castro with respect to claim 13, the Office Action turns to Tabbane, which is directed to a system for creating profiles used to locate mobile subscribers.⁸ As shown in Figure 1 of Tabbane, a mobile set MS in a vehicle VI can be located at one of three location zones: Z1, Z2, and Z3; in the illustrated example, the vehicle VI is located at the location zone Z1. A recording means MENR is provided to record the subscriber identity IMSI associated with the vehicle VI and the location zone in which the subscriber identity IMSI is located.⁹ A dynamic profile can be generated based on the amounts of time a subscriber identity IMSI remains in different location zones, and the dynamic profile can be stored in a SIM card.¹⁰

However, Tabbane does not disclose a customer terminal device that includes a pre-paid amount memory area configured to store pre-payment data corresponding to a pre-paid amount of money, and a processor configured to determine the dynamic client profile based on at least one random variable of a previous connection, as recited in amended claim 13. For example, although Tabbane does describe the storing of a dynamic profile on a SIM card, Tabbane does not depict a customer terminal device, such as a mobile telephone or a fixed telephone, including a processor configured to determine the dynamic client profile based on at least one random variable of a previous connection. Rather, the dynamic profile of Tabbane is not generated based on previous connections, but on previous locations of a subscriber. Also, the dynamic profile of Tabbane is not determined by a processor in a

⁸ See Tabbane from col. 1, line 59, to col. 2, line 4.

⁹ See *id.* at Figure 1 and at col. 3, lines 22-45.

¹⁰ See *id.* at col. 9, lines 6-45.

customer terminal device, but in the recording means MENR, which can subsequently transfer the dynamic profile to a SIM card.¹¹

For at least these reasons, Tabbane fails to remedy the deficiencies of Fenner and Castro with respect to amended claim 13.

Accordingly, Applicants respectfully submit that amended claim 13 is patentable over Fenner, Castro, and Tabbane for at least the reasons discussed above. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 13 under 35 U.S.C. § 103(a). Claims 14-17 depend from amended claim 13 and are allowable for at least the reasons discussed above.

Amended claim 18 is drawn to a chipcard that includes, among other features, a first memory area configured to store pre-payment data corresponding to a pre-paid amount of money, means for determining the dynamic client profile based on at least one random variable of a previous connection, and means for determining a usage fee for a new connection based on the dynamic client profile.

The suggested combination of Fenner, Castro, and Tabbane fails to disclose or suggest amended claim 18. For example, further to the discussion above with respect to amended claim 13, none of these references disclose or suggest a chipcard including (1) a memory area configured to store pre-payment data, (2) means for determining the dynamic client profile based on at least one random variable of a previous connection, and (3) means for determining a usage fee for a new connection based on the dynamic client profile. Fenner, Castro, and Tabbane are completely silent as to these features.

Accordingly, Applicants respectfully submit that amended claim 18 patentably defines over Fenner, Castro, and Tabbane for at least the above-discussed reasons. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 18

¹¹ See Tabbane at col. 9, lines 28-31.

under 35 U.S.C. § 103(a). Claims 20-22 depend from amended claim 18 and are allowable for at least the reasons discussed above.

Amended independent claims 23 and 27 respectively recite, among other features, a “first profile memory area” and “means for storing,” which both store “a dynamic client profile for at least one customer of the telecommunications network, said dynamic client profile indicating an average cost of previous connections of the customer and being derived from at least one random variable of the previous connections.” See, for example, Applicants’ specification at page 8, lines 7-9.

The suggested combination of Fenner, Castro, and Tabbane fails to disclose or suggest amended claims 23 and 27 for at least the reason that none of these references disclose a feature of storing a dynamic client profile indicating an average cost of previous connections of a customer. For example, the system of Fenner stores information regarding services available to a particular subscriber, the system of Castro stores information regarding pre-payment of connections, and the system of Tabbane stores information regarding the locations of a subscriber. None of these references, however, discuss the storing of information indicating an average cost of previous connections of a customer, as recited in both amended claim 23 and amended claim 27.

Accordingly, Applicants respectfully submit that amended claims 23 and 27 patentably define over Fenner, Castro, and Tabbane for at least the above-discussed reasons. Applicants respectfully request reconsideration and withdrawal of the rejection of claims 23 and 27 under 35 U.S.C. § 103(a). Claims 24-26 depend from amended claim 23, and claims 28-30 depend from amended claim 27, and these claims are also allowable for at least the reasons discussed above.

Amended claim 31 is drawn to a billing method that includes, among other features, creating a client traffic distribution curve based on the statistical characteristics, generating a

dynamic client profile based on the client traffic distribution curve, and calculating a usage fee associated with a new connection before termination of the new connection. See, for example, Applicants' specification from page 7, line 29, to page 8, line 3.

The suggested combination of Fenner, Castro, and Tabbane fails to disclose or suggest amended claim 31 for at least the reason that none of these references teach or suggest the creation of a client traffic distribution curve based on statistical characteristics. Further, none of Fenner, Castro, and Tabbane teach or suggest the generating of a dynamic client profile based on the client traffic distribution curve and the calculating of a usage fee associated with a new connection before termination of the new connection. For example, Castro teaches the calculating of a usage fee only after a connection is terminated (i.e., after the duration of the connection is measured and known).¹²

Accordingly, Applicants respectfully submit that amended claim 31 patentably defines over Fenner, Castro, and Tabbane for at least the above-discussed reasons. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 31 under 35 U.S.C. § 103(a). Claims 32-40 and 42 depend from amended claim 31 and are also allowable for at least the reasons discussed above.

Amended claim 43 is drawn to a method for billing a new connection in a telecommunications network, including, among other features, determining group statistical characteristics of previous connections of at least one group of users of the telecommunications network, determining customer statistical characteristics of previous connections of a customer of the telecommunications network, and deriving a dynamic client profile based on at least one of the group statistical characteristics and the customer statistical characteristics. See, for example, Applicants' specification from page 6, line 21, to page 7, line 11.

¹² See Castro at page 8, lines 20-24.

The suggested combination of Fenner, Castro, and Tabbane fails to disclose or suggest amended claim 43 for at least the reason that none of these references teach or suggest the determining of group statistical characteristics of previous connections of at least one group of users of the telecommunications network. Further, none of Fenner, Castro, and Tabbane teach or suggest the determining of customer statistical characteristics of previous connections of a customer of the telecommunications network, and the deriving of a dynamic client profile based on at least one of the group statistical characteristics and the customer statistical characteristics. Fenner, Castro, and Tabbane are completely silent as to these features.

Accordingly, Applicants respectfully submit that amended claim 43 patentably defines over Fenner, Castro, and Tabbane for at least the above-discussed reasons. Applicants respectfully request reconsideration and withdrawal of the rejection of claim 43 under 35 U.S.C. § 103(a). Claims 44-50 depend from amended claim 43 and are also allowable for at least the reasons discussed above.

New claim 51 is drawn to a method for determining usage fees in a telecommunications network, including, among other features, generating an overall client profile based on random variables associated with previous connections of a plurality of customers of the telecommunications network, and generating a customer client profile for a customer of the telecommunications network based on the overall client profile. See, for example, Applicants' specification from page 6, line 21, to page 7, line 16.

The suggested combination of Fenner, Castro, and Tabbane fails to disclose or suggest new claim 51 for at least the reason that none of these references teach or suggest the generating of an overall client profile based on random variables associated with previous connections of a plurality of customers of the telecommunications network. Further, none of Fenner, Castro, and Tabbane teach or suggest the generating of a customer client profile for a

Application No. 09/508,422
Reply to Office Action of August 2, 2004

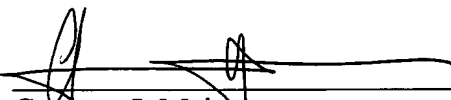
customer of the telecommunications network based on the overall client profile. Fenner,
Castro, and Tabbane are completely silent as to these features.

Accordingly, Applicants respectfully submit that new claim 51, and new claims 52-60
depending from claim 51, patentably define over Fenner, Castro, and Tabbane.

Consequently, in light of the above discussion and in view of the present amendment,
the present application is believed to be in condition for allowance and an early and favorable
action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier

Attorney of Record
Registration No. 25,599

James J. Kulbaski
Registration No. 34,648

Chien H. Yuan
Registration No. 48,056

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

GJM/JJK/CHY:pch
I:\ATTY\CHY\236561US\236561 AM 15OCT04.DOC